

REMARKS

In response to the Office Action dated May 4, 2005, Applicants respectfully request reconsideration based on the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance. No claims have been amended, added, or cancelled.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 1, 5-6, 11

In the Office Action, claims 1, 5-6, and 11 are rejected by the Examiner under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 5,638,508 to Kanai et al. (“Kanai”) and U.S. Patent No. 5,933,840 to Menon et al. (“Menon”) and Applicants’ admitted prior art. Applicants respectfully request reconsideration and withdrawal of these rejections as the alleged teachings of Kanai and Menon do not teach all of the limitations of claims 1, 5-6, and 11.

Independent claims 1 and 11 are directed to an improved “statistical record purge procedure” and method, wherein the “deletion of older statistical records in permanent memory” is initiated after “adequate temporary memory for storing new statistical records” is ensured. The new statistical records are those that are “generated while the older statistical records are being deleted.”

Applicants respectfully submit that the combination of Kanai and Menon does not disclose, teach, or suggest such a procedure or method, as alleged by the Examiner. Kanai discloses a system that processes transactions with the use of a log record for system recovery. The Examiner refers to column 4, lines 4-27 of Kanai, where Kanai’s transaction routine is disclosed as determining if the log buffer area of memory is full and, if the buffer is not full, temporarily storing a log record in the buffer area of memory. Menon, at column 5, lines 20-35, as referenced by the Examiner, teaches a “garbage collection” process in an information storage system of a computer. If a segment’s time “in the information storage system exceeds an age threshold value,” then that segment “is selected for garbage collection.” The Examiner appears to assert that Menon’s garbage collection of segments is equivalent to the deletion of records, as recited in claims 1 and 11. However, according to

Menon, the garbage collection process involves the compaction of partially empty segments “into a fewer number of completely filled segments, thereby creating a number of completely empty segments that are ready for updated information” (*Menon, column 1, lines 55-58*). FIG. 2 and the accompanying discussion in Menon illustrate that the garbage collection processing yields “garbage collected filled segments” and empty segments, both to be stored in the direct access storage device array of the system and not to be deleted. Furthermore, the generation of new records while older records are being deleted is not disclosed or taught by Menon. Accordingly, withdrawal of the 103(a) rejections of claims 1 and 11 is respectfully requested.

Because claims 5 and 6 depend on independent claim 1, the rejections of the dependent claims 5 and 6 cannot stand for the same reasons noted above by Applicants.

Claim 2

In the Office Action, claim 2 is rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Kanai, Menon, and Applicants’ admitted prior art in view of U.S. Patent No. 5,566,315 to Milillo et al. (“Milillo”). Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim 2 recites that “the adequate temporary memory [for storing new statistical records] comprises ninety percent or more free memory space.” The Examiner alleges that this feature is taught by Milillo and refers to column 2, lines 26-50 of Milillo for this teaching. Applicants respectfully disagree with the Examiner’s allegations. Milillo is directed to a procedure for maximizing “the amount of cache memory space available” and for minimizing “the number of blocks or blockages and disconnects” through the use of low and high thresholds (*Milillo, column 2, lines 27-31*). When the low threshold is reached, cache space is discarded until the high threshold is reached. Milillo provides an example where the “high threshold of free space may translate into 90% of the available cache memory space is used” (*Milillo, column 2, lines 40-41*). In contrast, claim 2 recites that 90% of free memory space, or 10% or less of used memory space, is adequate.

Thus, in addition to the fact that claim 2 is patentable due to its dependency on independent claim 1 (which has been shown above to be patentable), Applicants also submit that the separate section 103(a) rejection of claim 2 is incorrect and should be withdrawn.

Claims 3-4, 12-13

In the Office Action, Claims 3-4 and 12-13 are rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Kanai, Menon, and Applicants' admitted prior art in view of U.S. Patent No. 6,523,102 to Dye et al. ("Dye"). Applicants respectfully request reconsideration and withdrawal of these rejections.

Claims 3 and 12 are directed to "waiting a predetermined period of time if there is inadequate temporary memory [for storing new statistical records]" and then initiating deletion of older statistical records after "ensuring there is adequate temporary memory." Claims 4 and 13 cite that the predetermined time comprises "about thirty seconds."

Applicants respectfully disagree that Dye teaches the feature of claims 3-4 and 12-13, as alleged by the Examiner. Dye is directed to a system that improves computing through the use of storing compressed data in system memory on a nonvolatile memory subsystem. Dye discloses that "background tasks for performing operations on the compressed cache" are scheduled by a timer (*Dye, column 35, lines 52-55*), but there is no disclosure whatsoever of "waiting a predetermined period of time," as is recited in claims 3-4 and 12-13.

Thus, in addition to the fact that claims 3-4 and 12-13 are patentable due to their dependency, either directly or indirectly, on independent claims 1 and 11 (which have been shown above to be patentable), Applicants also submit that the separate section 103(a) rejections of claims 3-4 and 12-13 are incorrect and should be withdrawn.

Claim 7

In the Office Action, claim 7 is rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Kanai, Menon, and Applicants' admitted prior art in view of U.S. Patent No. 6,216,127 to Gans et al. ("Gans"). Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim 7 is directed to deleting the older statistical records, after "ensuring there is adequate temporary memory for storing new statistical records," and doing so "less

frequently than hourly but at least once daily.” The Examiner alleges that Gans teaches this feature at column 2, lines 30-42. Applicants respectfully disagree and submit that the recited features of claim 7 are not disclosed, taught, or suggested by Gans, in combination with Kanai, Menon, and Applicants’ admitted prior art. Specifically, Gans states that processes perform activities during certain time periods and uses garbage collection as a process example. Gans says that one garbage collector can operate at night, while another can operate during the daytime. However, as stated above with respect to claim 1, garbage collection is not the same as deletion. Moreover, Gans does not disclose the frequency of these processes, as is recited in claim 7, but only the time periods.

Thus, in addition to the fact that claim 7 is patentable due to its dependency on independent claim 1 (which has been shown above to be patentable), Applicants also submit that the separate section 103(a) rejection of claim 7 is incorrect and should be withdrawn.

Claims 8-10

In the Office Action, claims 8-10 are rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Menon and Gans and Applicants’ admitted prior art. Applicants respectfully request reconsideration and withdrawal of these rejections.

Independent claim 8 is directed to an improved statistical record purge procedure, wherein the scheduled deletion occurs “during a period when relatively few new statistical records are generated.”

Applicants respectfully submit that the combination of Menon and Gans and Applicants’ admitted prior art does not disclose, teach, or suggest such a procedure, as alleged by the Examiner. Again the Examiner asserts that the Menon reference teaches the deletion of older statistical records. However, as described above with respect to independent claims 1 and 11, Applicants disagree as Menon discloses a garbage collection process where partially-filled, old segments are grouped together to form completely filled segments and to leave empty segments available for new data. In addition, the Examiner alleges that Gans teaches the feature of “scheduling deletion ... during a period when relatively few new statistical records are generated.” Gans teaches, at column 2, lines 30-42, that certain processes can be scheduled “to run during a certain time period,” but is silent on specifically

DOCKET NO.: BELL-0118/01116
Application No.: 10/082,846
Office Action Dated: May 4, 2005

PATENT

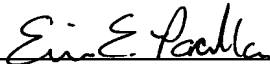
scheduling for a specific event occurrence, such as when few new records are generated, as recited in claim 8. Accordingly, withdrawal of the 103(a) rejection of claim 8 is respectfully requested.

Because claims 9 and 10 depend on independent claim 8, the rejections of the dependent claims 9 and 10 cannot stand for the same reasons noted above by Applicants.

Conclusion

For all the foregoing reasons, Applicants respectfully submit that the pending claims patentably define over the cited art. Accordingly, a Notice of Allowance for claims 1-14 is respectfully requested. In the event, however, that the Examiner believes that the application is not allowable for any reason, the Examiner is encouraged to contact the undersigned agent to discuss resolution of any remaining issues.

Date: July 29, 2005


Erin E. Pacella
Registration No. 56,239

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439